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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,435	08/15/2003	Aaron D. Bachelder	4020	9899
20985	7590	10/19/2004		
FISH & RICHARDSON, PC 12390 EL CAMINO REAL SAN DIEGO, CA 92130-2081			EXAMINER NGUYEN, PHUNG	
			ART UNIT	PAPER NUMBER

2632

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/642,435	<b>Applicant(s)</b> BACHELDER ET AL.	
	<b>Examiner</b> Phung T Nguyen	<b>Art Unit</b> 2632	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 August 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 7-12, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gross et al. (U.S. Pat. 6,326,903) in view of McConnell et al. (U.S. Pat. 5,710,555).

**Regarding claim 1:** Gross et al. disclose emergency vehicle traffic signal pre-emption and collision avoidance system which comprises all the claim subject matter as follows:

an intersection communications controller at each intersection for preemption (fig. 1, col. 3, lines 64-66);

a transceiver for receiving information from an emergency vehicle and transmitting information about the status of an intersection (col. 9, lines 21-26);

a real-time status monitor for monitoring status at a selected intersection, said status monitor relaying said status information at said intersections to said communications controller (col. 5, lines 50-59);

a transponder in each emergency vehicle receiving said status information being transmitted by said intersection transceiver, said transponder including a transceiver for transmitting emergency vehicle data to said intersection communications controller (col. 9, lines 16-26);

Art Unit: 2632

a display in said emergency vehicle displaying the status of said intersection and other emergency vehicles responding to an emergency (col. 5, lines 1-5);

whereby said emergency vehicle traffic signal preemption system operates autonomously by transmissions to and from said emergency vehicle and intersection (col. 3, lines 66-67, and col. 4, lines 1-4);

a traffic light controller receiving inputs from said communications controller to control the operation of traffic lights (col. 3, lines 66-67, and col. 4, lines 1-5) except controlling the operation of pedestrian lights at an intersection as claimed. However, McConnell et al. disclose siren detector comprising Prempt control means to control the operation of pedestrian lights (col. 3, lines 16-20). Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to employ the teaching of McConnell et al. in the system of Gross et al. so that the intersection communication controller not only controlling the operation of traffic lights but also controlling the pedestrian lights which is an advantage.

**Regarding claim 7:** Gross et al. disclose transponder communications controller; an on-board diagnostic circuit, said on-board diagnostic circuit processes data regarding an emergency vehicle and delivering said data to said transponder communications controller; a transceiver in said transponder transmitting said data from said on-board diagnostic circuit to said intersection (col. 4, lines 38-57).

**Regarding claim 8:** Gross et al. disclose the intersection status information being delivered to an intersection preemption circuit; said intersection preemption circuit activating said display in said transponder to indicate the status of said intersection (col. 9, lines 16-26).

**Regarding claim 9:** Gross et al. disclose the display including colored LEDS to indicate the status of an intersection (col. 9, lines 66-67, and col. 10, lines 1-2).

**Regarding claim 10:** Gross et al. disclose the colored LEDS are a green LED, a yellow LED and a red LED, said green, yellow, and red LEDS selectively indicating preemption detected, preemption active or a conflict with another approaching emergency vehicle detected respectively (col. 9, lines 66-67, and col. 10, lines 1-2).

**Regarding claim 11:** All the claimed subject matter is already discussed in respect to claim 1 above.

**Regarding claim 12:** Refer to claim 7 above.

**Regarding claim 16:** Refer to claim 9 above.

**Regarding claim 17:** Refer to claim 10 above.

3. Claims 2-6, and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gross et al. in view of McConnell et al. and further in view of Smith et al. (U.S. Pat. 4,775,865).

**Regarding claim 2:** Gross et al. and McConnell do not teach the intersection communications controller controls the operation of a display at each corner of an intersection to indicate the direction and location of one or more emergency vehicles approaching an intersection. However, Smith et al. disclose emergency vehicle warning and traffic control system comprising display 20 which locates at each corner of an intersection to indicate the direction of the emergency vehicle approaching the intersection (fig. 1, col. 3, lines 39-48, and col. 5, lines 12-20). Therefore, it would have been obvious to the skilled artisan to utilize the

Art Unit: 2632

teaching of Smith et al. in the system of the combination so that pedestrian at the intersection can be alert and move out the path of emergency vehicles.

**Regarding claim 3:** Smith et al. disclose the status monitor is a real-time status monitor (col. 3, lines 39-48).

**Regarding claim 4:** Smith et al. disclose including an audio warning system to alert pedestrian at the intersection (col. 5, lines 66-67, and col. 6, lines 1-2).

**Regarding claim 5:** Smith et al. disclose the audio warning system includes an audio warning circuit receiving an output from said intersection communications controller, said audio warning circuit activating an audio warning device at said intersection (col. 5, lines (67-68, and col. 6 lines 1-2).

**Regarding claim 6:** Smith et al. inherently disclose the audio warning device comprising a speaker at each corner of an intersection (col. 5, lines 67-68).

**Regarding claim 13:** Refer to claim 4 above.

**Regarding claim 14:** Smith et al. disclose the activation of the audio alarm comprises activating an audio alarm circuit to transmit a predetermined audio communications (col. 5, lines 52-67).

**Regarding claim 15:** Refer to claim 6 above.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Poursartip [U.S. Pat. 6,621,420] discloses device and method for integrated wireless transit and emergency vehicle management.

Art Unit: 2632

b. Obeck [U.S. Pat. 5,014,052] discloses traffic signal control for emergency vehicles tracking.

c. Aptiz et al. [U.S. Pat. 6,232,889] disclose system and method for signal light preemption and vehicle tracking.

d. Klosinski et al. [U.S. Pat. 5,889,475] disclose warning system for emergency vehicles.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phung T Nguyen whose telephone number is 571-272-2968. The examiner can normally be reached on 8:00am-5:30pm Mon thru. Friday, with alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on 571-272-2964. The fax numbers for the organization where this application or proceeding is assigned are 703-305-3988 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.

Phung Nguyen



Date: October 15, 2004